

## Amendments to the Claims:

Please amend claims 32 and 33, and cancel claims 24 and 41-70. This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

- 1-31 (canceled)
- 32 (currently amended): A probe that is removably insertable into a laser desorption mass spectrometer comprising a substrate having a <u>flat</u> surface and an adsorbent bound to the surface, <u>the adsorbent having a binding characteristic for binding an analyte</u>, wherein a <u>the binding characteristic of the substrate</u> varies in a <u>continuous</u> gradient along one or more linear axes <u>of the probe</u>, wherein the probe is removably insertable into a laser desorption <u>mass spectrometer</u>.
- 33 (currently amended): The probe of claim 32 wherein the binding characteristics vary characteristic varies in a gradient along one linear axis.
- 34 (previously presented): The probe of claim 33 wherein the adsorbent is an anion exchange adsorbent and the binding characteristic varies according to charge.
- 35 (previously presented): The probe of claim 33 wherein the adsorbent is a cation exchange adsorbent and the binding characteristic varies according to charge.
- 36 (previously presented): The probe of claim 33 wherein the adsorbent is a hydrophilic adsorbent and the binding characteristic varies according to hydrophilicity.
- 37 (previously presented): The probe of claim 33 wherein the adsorbent is a hydrophobic adsorbent and the binding characteristic varies according to hydrophobicity.

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- 38 (previously presented): The probe of claim 33 wherein the adsorbent is a metal chelate adsorbent and the binding characteristic varies according to valency.
- 39 (previously presented): The probe of any of claims 32-38 further comprising an analyte bound to the adsorbent.
- 40 (previously presented): The probe of any of claims 39 further comprising an energy absorbing molecule contacting the analyte.

41-70 (canceled)